



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/700,339

11/03/2003

Thomas A. Chodacki

57119 (72011)

5244

21874

7590

10/21/2009

EDWARDS ANGELL PALMER & DODGE LLP

P.O. BOX 55874

BOSTON, MA 02205

EXAMINER

PRICE, CARL D

ART UNIT

PAPER NUMBER

3749

MAIL DATE

DELIVERY MODE

10/21/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/700,339	Applicant(s) CHODACKI ET AL.	
	Examiner Carl D. Price	Art Unit 3749	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 23 September 2009 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ They raise the issue of new matter (see NOTE below);
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. ☐ Applicant's reply has overcome the following rejection(s): _____.
 6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 7. ☐ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
 The status of the claim(s) is (or will be) as follows:
 Claim(s) allowed: _____.
 Claim(s) objected to: _____.
 Claim(s) rejected: _____.
 Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:
See Continuation Sheet.
 12. ☐ Note the attached Information *Disclosure Statement*(s). (PTO/SB/08) Paper No(s). _____.
 13. ☐ Other: _____.

/Carl D. Price/
 Primary Examiner, Art Unit 3749

Continuation of 11. does NOT place the application in condition for allowance because:

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, applicant's attention is directed to US005899684 (McCoy et al) and US005660043 (Pfefferle et al), which establish the knowledge and the level of ordinary skill at the time the claimed invention was made. US005899684 (McCoy et al) discloses and teaches the use of hot surface (i.e.- electric resistance) ignition systems for gas ignition in a wide range of units (e.g.- "gas clothes dryers, gas ovens, gas fired furnaces, and boilers thus replacing and eliminating standing gas pilot lights"), for more than twenty years. US005899684 (McCoy et al) also discloses these strong oxidation resistant ceramic hot surface ignition elements reaches ignition temperature in less than 10 to 15 seconds and utilizes about 40 watts of power. US005660043 (Pfefferle et al) teaches that it is known to maintain the electric resistance igniter at an operational temperature that is less than the gas ignition temperature but above room temperature and so the ceramic electric resistance igniters can be re-heated so as to re-ignite the gas within a near instantaneous re-ignition time period.

Clearly, in view of the teachings of US005899684 (McCoy et al) and US005660043 (Pfefferle et al), the examiner does not rely on knowledge gleaned only from the applicant's disclosure. That is, since both US005899684 (McCoy et al) and US005660043 (Pfefferle et al) acknowledge the use of electric resistance ignition systems to solve the problem of very low re-ignition times, and where US005899684 (McCoy et al), in particular, acknowledges the use of ceramic electric resistance ignition elements as particularly useful to produce quick re-ignition response, since operation of the electric resistance igniter can be controlled so the electric resistance igniter is at a temperature less than the gas ignition temperature so the electric resistance igniter can be re-heated so as to re-ignite the gas within a desired re-ignition time period.

Furthermore, concerning the examiner's alleged use of hindsight and whether a person having ordinary skill in the art would readily use electric resistance ceramic ignition elements generally and more specifically the claimed "sintered ceramic ignition" (new claims 36 and 37) taught in prior art fields other than that intended for applicant's invention ("in the clothing-dryer system"), applicants' attention are directed to the newly cited prior art references of US004418661 (Esper), US005233166 (Maeda et al) and/or US004762982 (Ohno et al) which separately and collectively teach sintered ceramic electric resistance ignition elements are known to be used widely as an ignition source for various combustion and heating apparatuses, can quickly raise temperature, can be used for an extended period of time regardless of environmental conditions and is superior in ignition reliability and safety (e.g.- US005233166 (Maeda et al); sintered ceramic electric resistance ignition heaters (glow plugs) are known to quickly achieve preheat temperature necessary to ignite fuel vapor-air mixture "in less than 1 second" (see US004418661 (Esper)) and "for example to about 900.degree. C. in about three seconds" (see US004762982 (Ohno et al)).

In view of the teachings of US004418661 (Esper), US005233166 (Maeda et al) and/or US004762982 (Ohno et al), as well as that which is taught by US003589846 (Place), US005899684 (McCoy et al) and US005660043 (Pfefferle et al), the examiner can not agree with applicants' assertion that the recitation "near instantaneous relight" in the Pfefferle document is not a disclosure of six seconds or less as Applicants claim. When viewing evidence found in the prior art as a whole, only represented in part by the prior art discussed immediately herein above, it is clear that a person having ordinary skill in the art would understand the recitation "near instantaneous relight" (Pfefferle) as a period of time not inconsistent with igniting a fuel-air mixture "in less than 1 second" (US004418661 (Esper); and "about three seconds" US004762982 (Ohno et al). Further in this regard, the examiner maintains the position that "since the actual warm-up time for a given appliance control application would necessarily depend on numerous design parameters such as the type and amount of fuel burned, the size and type of resistance igniter, the overall size and shape of the burner, etc., to operate US003589846 (Place) such that the desired re-ignition time period is about six seconds or less can be viewed as nothing more than merely a matter of choice in design absent the showing of any new or unexpected results produced therefrom over the prior art of record. Similarly, selective use of a given fuel ignition system with any given appliance would have been obvious to a person having ordinary skill in the art and would be dictated by given installation or design concerns. Indeed, the "less than 1 second" (US004418661 (Esper)) and "about three seconds" (US004762982 (Ohno et al)) igniting of a fuel-air mixture present evidence that ignition time period may vary according a given installation of combustor arrangement. However, in further support the examiner's position applicant's attention is directed to, for example, US005206484 (Issartel) which acknowledges that operational conditions such as outside temperature, heating currents and thermal inertia affect and indeed are used to determine the time required to preheat glow-plugs.

In view of the teachings of US004418661 (Esper), US005233166 (Maeda et al) and/or US004762982 (Ohno et al), as well as that which is taught by US003589846 (Place), US005899684 (McCoy et al) and US005660043 (Pfefferle et al), one can not deny that electric resistance ignitors in general, ceramic electric resistance ignitors, and more specifically sintered ceramic electric resistance ignitors, are used widely as an ignition source for various combustion and heating apparatuses. In this regard the examiner simply can not agree with applicants' suggestion that "Clearly, the skilled worker would not have looked to an aircraft turbine for design of a clothes dryer system.", since the prior art defines the field of endeavor for sintered ceramic electric resistance ignitors to be used widely as an ignition source for various combustion and heating apparatuses. Certainly, the gas turbine electric resistance ignitor of US005660043 (Pfefferle et al) represents and falls within the understanding of the prior art acknowledged "various combustion ... apparatuses", And, US003589846 (Place) being applied to burners of the type used in clothes dryers, furnaces and the like" certainly represents and falls within the understanding of prior art acknowledged "various ... heating apparatuses".

Furthermore, the teachings presented in the prior art references of US004418661 (Esper), US005233166 (Maeda et al) and/or US004762982 (Ohno et al) not only address the specific limitations of the claimed invention set forth in claims 36 and 37, but also illustrate the level of ordinary skill in the art at the time of the invention with respect to at least the known advantages, properties and characteristics of electric resistance ignitors in general, ceramic electric resistance ignitors, and more specifically sintered ceramic electric resistance ignitors, with regard to the limitations of the claimed invention set forth in claims 1-6, 16, 17, 21, 22, 32-35, 38 and 39. That is, sintered ceramic electric resistance ignition elements are known to be used widely as an ignition source for various combustion and heating

apparatuses, can quickly raise temperature, can be used for an extended period of time regardless of environmental conditions and is superior in ignition reliability and safety.

In support of the examiner's statement that "... selective use of a given fuel ignition system with any given appliance would have been obvious to a person having ordinary skill in the art and would be dictated by given installation or design concerns", applicants' attention is directed to US004106889 (Katchka) which acknowledges the use of "combustible fuel such as propane, natural gas and the like" for operating fuel fired appliances of the type using electric resistance igniters.

In response to applicant's argument that the examiner has combined an excessive number of references, reliance on a large number of references in a rejection does not, without more, weigh against the obviousness of the claimed invention. See *In re Gorman*, 933 F.2d 982, 18 USPQ2d 1885 (Fed. Cir. 1991).